

MIDDLESEX COUNTY EXTENSION SERVICE

Mailing Address: County Administration Building New Brunswick, New Jersey 08901

Office Location: 7 Elm Row New Brunswick, New Jersey

Agriculture (201) 745-3442 4-H Youth Develop. (201) 745-3448 Home Economics (201) 745-3445

February 22, 1982

MISC- XPCT. 02611

COOPERATIVE EXTENSION SERVICE COOK COLLEGE

Dear Mr. Musser:

Richard A. Musser

T & A Associates P. O. Box 828

Red Bank, New Jersey 07701

Enclosed please find the results of the various tests run on 2 samples from the bottom of New Market Pond in Piscataway, N. J.

Sample B-6 Surface - This sample is not usable as topsoil as it is now. The organic matter is too high. Also the Mechanical Analysis shows that the sand content is too low and silt and clay too high.

Sample B-10 Subsurface - This sample probably contains some of the original soil from the area before the stream was dammed and would be usable as topsoil as it is now.

Practically speaking when the pond is deepened, both surface and subsurface soil will be removed. If there was a way to thoroughly mix surface and subsurface in the proportion of l part surface soil plus 3 parts subsurface soil, you would have quite a good soil with about 4,7% sand, 32% silt and 21% clay.

Perhaps the 2 materials could be layered in a stockpile and mixed well with some sort of equipment.

Hope this information will be of help to you.

Very truly yours,

WARNER H. THURLOW

Agricultural Agents Middlesex County Claime K Fogety
ELAINE K. FOGERTY

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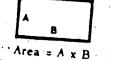
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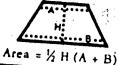
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ADDRESS_	PO Bx 8	328, Red Ban	S. NJ 07701	E		SOU	TECT DEDOC	
Samile nun	ber_B 6/9	Surface				SOIL	TEST REPORT	. Г
Plant to be	grown_ Elaine		Serial numbe	4. 1 . 4.7	·	Soil Testion I	aboratory, Lipman	•• ••
Referred to	Elaine	Fogerty	Soil texture			New Jersey Agric	cultural Experiment	Mall Station
			County M	<u>lddlesex</u>			•	ora (i Oli
	ρН	Magnesium	Phosphorus		Organic	M	ECHANICAL ANA	LYSIS**
SOIL	_6.0	152	74	Potassium	Matter	SAND	SILT	CLAY
TEST	(found)			_33	24.50%	24%	42%	
RESULTS	606	TPRARE	KYKKKYYYY 8 pe r millio	XXXX)	1(-1	34%
		Mark "	V.Noh	401	11111	LOW	NAN	14171
	(desired)	Yelative	level for this p	plant)	NUIGH	Cond	uc <u>tivity (</u>	
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COMMENTS			IT wo	what he	e ox	_		
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COOPER	RATIVE EXTE	NSION SERVICE	An Equ	al Opportunity Em	ployer	To face, color,	national origin, or hand	dicap.
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INFORMATION FOR LAWNS AND HOME GARDENS

Lime and fertilizer recommendations for lawns and home gardens are generally made in terms of pounds of material per 1000 square feet of area. Approximate number of square feet in areas of different size and shape plots can be calculated using the formulas below. Measure length or width of A, B, D and H in feet.









Every bag or container of fertilizer must be labeled to show the guaranteed minimum percentage of Nitrogen (N), Phosphare (P2O5) and Potash (K2O) in that order. Area = $0.8 (D \times D)$

EQUIVALENT AMOUNT OF PLANT NUTRIENTS (N, P205, K20) FROM FERTILIZERS OF THE SAME RATIO. For example: 17 lbs. 6-12-6 contains the same amount of N, P2O5 and K2O as 20 lbs; of 5-10-5.

1-2 lbs.	2-1 rotio grade	1.2	-2 ratio	ame amour 2-1	nt of N, P ₂ O ₅	and K ₂ O	as 20 lbs; of 5	OF THE 9	AME RATIO
20 17 13 10	5-10-5 6-12-6 8-16-8 10-20-10	20 17 13	grade 5-10-10 6-12-12 8-16-16	lbs. 10 8 6	grade 10-5-5* 12-6-6	lbs. 10	1-1 mtio grade 10-10-10 12-12-12	1-1 lbs. 14	-2 ratio grade 7-7-14
•For al	Il practical pu	urposes a	10-20-20 10-6-4 fertiliz	5 ser is the	16-8-8 20-10-10 's same as a 10-	6 5 5-5 and o	16-16-16 20-20-20	13 11 10	_8-8-16 9-9-18 10-10-20

•For all practical purposes a 10-6-4 fertilizer is the same as a 10-5-5 and one may be substituted for the other. Weights of lime and fertilizer materials can be converted to ordinary household measures using the follow-

ing table. The values are not precise but are near enough for all practical purposes. One gallon is equivalent to 4 quarts, or 8 pints. One pint is equivalent to 2 cups, or 32 tablespoons, or 96 teaspoons.

Kind of Material	Angentian was of 96 teaspoons.					
	10 qt. bucket	Froximate Weigh	Per Volume A	leasure		
Ground limestone	lbs.	Valion	quart	pint	CHA	
Hydrated lime	· 30 ·	lbs.	lbs.	lbs.	CUP	
norganic mixed family	10	12	3	11/2	lbs.	
CAPILL MIXEL LAW III	20	4	1	1/2		
Made completely	15	8	2	1 1	4	
completely from inorganic	materials. (2) Contain	6	11/2	· k	<i>'</i> 2	
ibuted in cooperation with U.S. Densey	Containin	some natural or	synthetic ores		3/8	
Made completely from inorganic in the completely from inorganic in the complete in cooperation with U.S. Department	ont of Agriculture in furthers	nce of the Assert	, motive orga	enic materia	ls.	

Distributed in cooperation with U.S. Department of Agriculture in furtherance of the Acts of Congress of May 8 and June 30, 1914. Cooperative

NAME T	& M ASSOCIATES DATE			
ADDRESS_	(continued)		SOIL TEST REPORT	
Sample num	Der B 10/sub surface Serial number MX 92	<u> </u>	SOIL LEST KENOKI	L
Plant to be	grownSoil texture_sandy_1	26	Soil Testing Laboratory, Lipman Ha	
Referred to	Soil texture Salidy 1	oam	New Jersey Agricultural Experiment St	ll ation
	County	<u> </u>		
5011	pH Magnesium Phosphorus Potassium	Organic Matter	MECHANICAL ANALYSIS	
SOIL	6.4 270		SAND SILT	CLAY
TEST	(found) [pounds available an acre] '	2.16%	54%28%	18%
RESULTS	A = A + A + A + A + A + A + A + A + A +	0.0		Loc
	(desired) relative level for the	Local	•	
I IVE DEC	vicialite level jor inis plant)		Conductivity	(1:2)
LIME RECO	MMENDED Amount persq. ft.		. 19 OK	
	11	n	low to apply	•
	Mone avoll			•
FERTILIZE	R RECOMMENDED Amount per	12		
Kind	Amount per sq. ft.	н	low to apply	
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COMMENTS		1		
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	perative Extension Service provides information and educational and			

ational services to all people without regard to race, color, national origin, or handicap. An Equal Opportunity Employer

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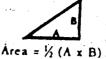
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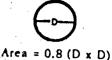
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1-2-1 ratio	1-2	-2 ratio	2-1-1		_	as 20 lbs. of 5		•
lbs. grade 20 5-10-5 17 6-12-6 13 8-16-8 10 10-20-10	lbs. 20 17 13	grade 5-10-10 6-12-12 8-16-16 10-20-20	lbs. 10 8 6 5	grade 10-5-5* 12-6-6 16-8-8 20-10-10	lbs. 10 8 6	grade 10-10-10 12-12-12 16-16-16 20-20-20	1-1- lbs. 14 13 11	2 ratio grade 7-7-14 8-8-16 9-9-18 10-10-20

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	10 qt. bucket	gallon	quart	pint	CUP		
Ground limestone	lbs.	lbs.	lbs.	lbs.	lbs.		
Hydrated lime	30 10	12	3	11/2	*		
Inorganic mixed fertilizers (1)	20	4	1	%	1/4		
Organic mixed fertilizers (2)	15	8	2	1	1/2		
(1) Made completely from increasing	1 (2) =		1/2	X	3/8		

) Made completely from inorganic materials. (2) Containing some natural or synthetic organic materials.

Distributed in cooperation with U.S. Department of Agriculture in furtherance of the Acts of Congress of May 8 and June 30, 1914. Cooperative Extension Service work in agriculture, home economics, and 4-H. John L. Gerwig, dean of Extension.

MIDDLESEX COUNTY EXTENSION SERVICE COUNTY ADMINISTRATION BUILDING NEW BRUNSWICK, NJ 08901

TEL: 745-3442

Below is a list of specifications for satisfactory topsoil surface soil or soil material prepared in the Soils Department of Rutgers University. These specifications apply only to soil material which is to be transported to a new location, and used as is, and not to be mixed with the existing soil in place. This usually means applying the transported soil to a depth of 8 to 12 inches. These specifications do no apply to soil materials which are to be subsequently mixed with the existing surface soil in place.

SPECIFICATIONS FOR SATISFACTORY TOPSOIL, SURFACE SOIL OR SOIL MATERIAL TO BE TRANSPORTED TO A NEW LOCATION AND USED FOR PLANTING PURPOSES.

Physical Limits, Per Cent by Weight

Quantity	Size Fraction	Diameter
None Less than 3% Less than 10% 40-60% 25-50% Less than 20%	Gravel Gravel Gravel Sand Silt Clay	Diameter Larger than one inch to 1 inch mm. to 1 inch mm. to 2 mm. mm. to 2 mm. mm. to .05 mm. Less tha .002 mm.

CHEMICAL LIMITS

Organic matter (wet digestion method) 2.5-10% Soil reaction (ph) 4.5-7.0 Salt concentration (1-2 soil water ratio) less than 50.